

PATENT ABSTRACTS OF JAPAN(11)Publication number : **08-197306**(43)Date of publication of application : **06.08.1996**

(51)Int.Cl.

B23B 27/14
B23P 15/28
C04B 35/583(21)Application number : **07-030085**(71)Applicant : **mitsubishi materials corp**(22)Date of filing : **26.01.1995**(72)Inventor : **YAMAMOTO KAZUO****(54) CUTTING TOOL MADE OF CUBIC SYSTEM BORON NITRIDE BASE SUPERHIGH PRESSURE SINTERED MATERIAL HAVING HIGH STRENGTH AND HIGH TOUGHNESS**

(57)Abstract:

PURPOSE: To provide a cutting tool made of a high-strength and highly tough CBN base superhigh pressure sintered material in which the proportion of CBN grain is specified.

CONSTITUTION: A cutting tool is made of a CBN base superhigh pressure sintered material which is made up of a combination phase having a composition composed of 7 to 12% reaction productive phase where the proportion of CBN grain as a hard dispersed phase is 45 to 70vol.%, and the remainder is composed of 20 to 40vol.% of Al₂O₃, AlB₂, AlN and TiB, and TiC and inevitable impurity, the remainder, and which forms a structure of skeleton structure formed of CBN grains and Al₂O₃ grains.

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]